BEST AVAILABLE COPY

This listing of claims will replace all prior versions of claims in the application.

- Claim 1. (currently amended) A method for preparation of a photoresist composition comprising:
- (a) treating a prepared resin with one or more organic solvents chosen from among a halogenated solvent and an alkane solvent, the resin comprising phenolic and alkyl acrylate photoacid labile groups;
- (b) admixing the treated resin with a photoactive component to provide a photoresist composition.
- Claim 2. (original) The method of claim 1 wherein the resin has been isolated from a resin synthesis mixture prior to treatment with one or more organic solvents.
- Claim 3. (original) The method of claim 1 wherein the treatment with one or more organic solvents separates low molecular weight species of the resin from higher molecular weight species of the polymer.
- Claim 4. (original) The method of claim 1 wherein treatment with the one or more organic solvents removes resin species having a Mw of about 2,000 or less.
- Claim 5. (currently amended) The method of claim 1 wherein treatment with the one or more organic solvents removes resin species having a Mw of about 1,000 100 or less.
- Claim 6. (original) The method of claim 1 wherein treatment with the one or more organic solvents removes resin species having a Mw of about 500 or less.
- Claim 7. (original) The method of claim 1 wherein the resin is treated with methylene chloride.

BEST AVAILABLE COPY

Claim 8. (original) The method of claim 1 wherein the resin is treated with one or more of a halogenated solvent; a solvent having an ester; a lactate; a hydroxy-containing solvent; an ether; or an alkane.

Claim 9. (original) The method of claim 1 wherein the resin is treated with one or more of chloroform, ethyl acetate, anisole, ethyl lactate, methyl lactate, a glycol, methanol, ethanol, hexane, or heptane.

Claim 10. (original) The method of claim 1 wherein the resin is washed with the one or more organic solvents.

Claim 11. (original) The method of claim 1 wherein the resin is extracted with the one or more organic solvents.

Claim 12. (original) The method of claim 1 wherein the resin is soxhlet extracted with the one or more organic solvents.

Claims 13-14. (cancelled)

Claim 15. (original) The method of claim 1 wherein the resin binder is a phenolic polymer with pendant inert blocking groups.

Claims 16-24. (cancelled)

Claim 25. (previously presented) The method of claim 1 wherein the resin is treated with a halogenated solvent.



- Claim 26. (previously presented) The method of claim 1 wherein the resin is treated with a solvent having an ester.
- Claim 27. (previously presented) The method of claim 1 wherein the resin is treated with a lactate.
- Claim 28. (previously presented) The method of claim 1 wherein the resin is treated with a hydroxy-containing solvent.
- Claim 29. (previously presented) The method of claim 1 wherein the resin is treated with an alkane solvent.
- Claim 30. (previously presented) A method for preparation of a photoresist composition comprising:
- (a) washing a prepared resin with one or more organic solvents, the resin comprising phenolic and alkyl acrylate photoacid labile groups;
- (b) admixing the treated resin with a photoactive component to provide a photoresist composition.
- Claim 31. (currently amended) The method of claim 30 29 wherein the resin is washed with methylene chloride.
- Claim 32. (currently amended) The method of claim 30 29 wherein the resin is washed with a halogenated solvent.
- Claim 33. (currently amended) The method of claim 30 29 wherein the resin is washed with a solvent having an ester.

BEST AVAILABLE COPY

Claim 34. (currently amended) The method of claim 30 29 wherein the resin is washed with a lactate.

Claim 35. (currently amended) The method of claim 30 29 wherein the resin is treated with a hydroxy-containing solvent.

Claim 36. (currently amended) The method of claim 30 29 wherein the resin is treated with an alkane solvent.

Claims 37-45. (cancelled)